VARIABLE GAM AMPLIFIER INPUT TERMINAL OF POWER AMPLIFIER Vref -POWER AMPLIFIER •¢c 20 DUPLEXER 30 COMMUNICATION BAND SWITCH

FIG. 1 RELATED ART

FIG. 2 RELATED ART

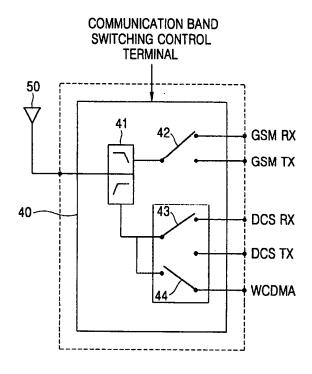


FIG. 3

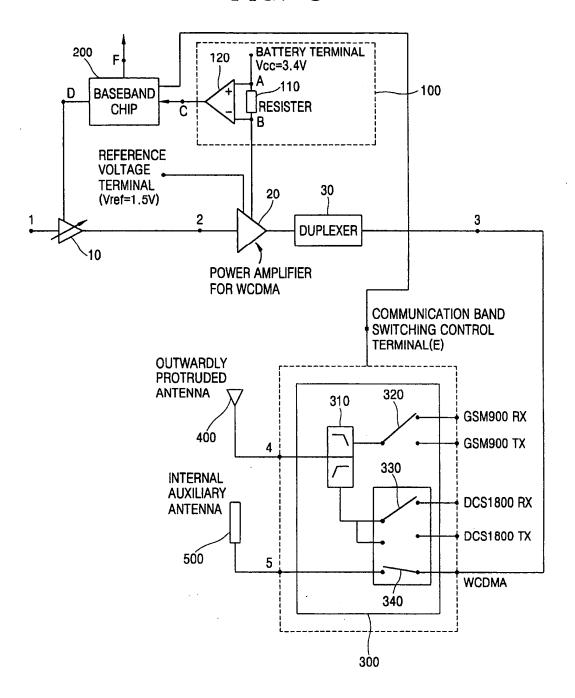


FIG. 4

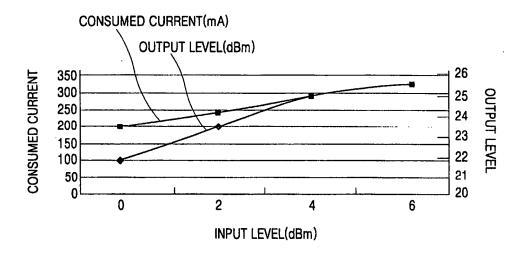


FIG. 5

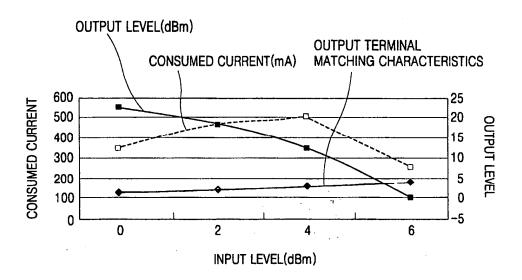


FIG. 6

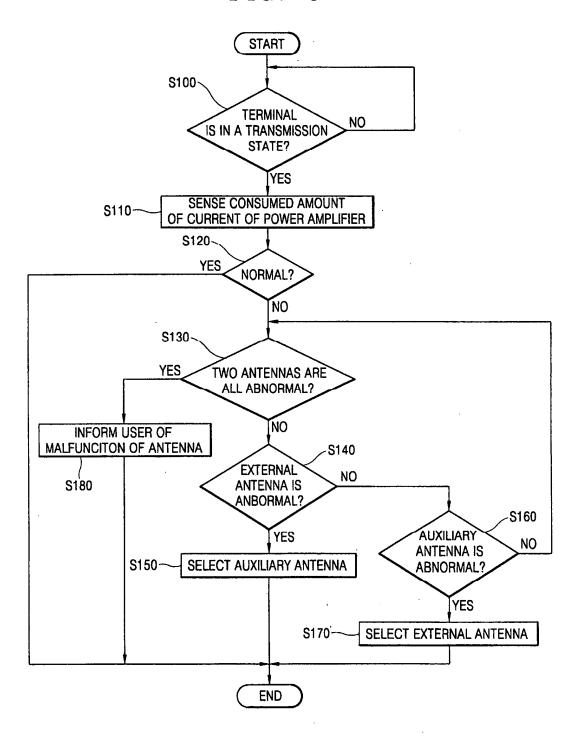


FIG. 7

| INPUT LEVEL | OUTPUT LEVEL(dBm) | CONSUMED CURRENT(mA) | VOLTAGE OF TERMINAL B | VOLTAGE OF TERMINAL A | VOLTAGE OF TERMINAL C |
|----------------|----------------------|----------------------|--------------------------|--------------------------|--------------------------|
| 0 | 21.9 | 201 | 3.38995 | 3.4 | 0.201 |
| 2 | 23.65 | 244 | 3.3878 | 3.4 | 0.244 |
| 4 | 24.98 | 289 | 3.38555 | 3.4 | 0.289 |
| 6 | 25.68 | 327 | 3.38365 | 3.4 | 0.327 |

FIG. 8

| LEVEL | INPUT OUTPUT TERMINAL OUTPUT CONSUMED VOLTAGE OF VOLTAGE OF LEVEL MATCHING CHARACTERISTICS LEVEL(dBm) CURRENT(mA) TERMINAL B TERMINAL A | OUTPUT LEVEL(dBm) | CONSUMED CURRENT (mA) | VOLTAGE OF TERMINAL B | CONSUMED VOLTAGE OF VOLTAGE OF UNITAGE OF UN | VOLTAGE OF TERMINAL C |
|-------|---|----------------------|-----------------------|-----------------------|--|-----------------------|
| 0 | | 21.9 | 337 | 3.38315 | 3.4 | 0.337 |
| 2 | 2 | 18.6 | 477 | 3.37615 | 3.4 | 0.477 |
| 4 | 3 | 12.1 | 511 | 3.37445 | 3.4 | 0.511 |
| 6 | 4 | -0.9 | 275 | 3.38625 | 3.4 | 0.275 |

FIG. 9

| TERMINAL E | COMMUNICATION BAND SWITCH | TRANSMISSION PATH OF SIGNAL | VOLTAGE STATE OF TERMINAL C |
|------------|------------------------------|-----------------------------|---|
| 1 | ON | TERMINAL 3—— TERMINAL 5 | IF THE VOLTAGE OF TERMINAL C IS DIFFERENT FROM THE NORMAL STATE |
| 0 | OFF | TERMINAL 3—— TERMINAL 4 | IF VOLTAGE OF TERMINAL C IS SAME AS THE NORMAL STATE |